

PATENT
Attorney Docket No. 032005-120

WHAT IS CLAIMED IS:

1 1. A system for injecting a sponge into tissue, the system comprising:
2 a catheter having a closed distal end and a side port adjacent the
3 distal end for delivering a pledget of sponge material in a hydrated state to the
4 tissue; and

5 an adaptor connected to the catheter for hydrating and delivering
6 the pledget to the catheter, the adaptor having a tapered lumen with a large
7 diameter proximal end and a small diameter distal end, wherein the small diameter
8 distal end is connected to the catheter, and wherein the adaptor is removable from
9 the catheter.

1 2. The system of Claim 1, wherein the adaptor is fixed to the catheter.

1 3. The system of Claim 1, further comprising a biopsy cannula having
2 a tissue puncturing distal end and a side port positioned adjacent the distal end,
3 wherein the catheter is configured to fit within the biopsy cannula to deliver the
4 pledget to the tissue.

1 4. The system of Claim 3, wherein the biopsy cannula includes a first
2 indexing member and the catheter includes a second indexing member for radially
3 aligning the catheter with the cannula.

1 5. The system of Claim 4, wherein the first and second indexing
2 members include at least one projection and at least one corresponding recess.

PATENT
Attorney Docket No. 032005-120

1 6. The system of Claim 3, wherein the biopsy cannula is a breast
2 biopsy cannula.

1 7. A system for injecting a sponge into tissue, the system comprising:
2 a catheter having a closed distal end and a side port adjacent the
3 distal end for delivering a pledget of sponge material in a hydrated state to the
4 tissue;

5 an adaptor connected to the catheter for hydrating and delivering
6 the pledget to the catheter, the adaptor having a tapered lumen with a large
7 diameter proximal end and a small diameter distal end, wherein the small diameter
8 distal end is connected to the catheter; and
9 a pledget of sponge material preloaded in the adapter.

1 8. The system of Claim 7, wherein the sponge is an absorbable sponge
2 material.

1 9. The system of Claim 7, wherein the sponge contains a radiopaque
2 marker.

1 10. The system of Claim 7, wherein the adaptor and pledget of sponge
2 material are arranged to deliver the pledget to the catheter.

1 11. A method of delivering an absorbable radiopaque marker to a
2 biopsy site comprising:
3 capturing tissue from a biopsy site using a cannula inserted to the biopsy
4 site; and

PATENT
Attorney Docket No. 032005-120

5 delivering an absorbable radiopaque marker through the cannula to the
6 biopsy site.

1 12. The method of Claim 11, wherein the absorbable radiopaque
2 marker is formed of an absorbable sponge material.

1 13. The method of Claim 11, wherein the tissue is removed from the
2 biopsy site through a side port of the cannula and the absorbable radiopaque
3 marker is delivered through the side port of the biopsy cannula.

1 14. The method of Claim 11, wherein the cannula remains in place at
2 the biopsy site after removal of the tissue for delivery of the absorbable
3 radiopaque marker.

1 15. The method of Claim 11, wherein the absorbable radiopaque
2 marker is formed of a hemostatic sponge material.

1 16. The method of Claim 11, wherein the tissue is removed from a
2 breast biopsy site.

1 17. A method of facilitating hemostasis of a biopsy site comprising:
2 removing tissue from a biopsy site through a side port of a cannula
3 inserted to the biopsy site; and
4 delivering a hemostasis promoting material through the side port of
5 the cannula to the biopsy site, wherein the hemostasis promoting material is
6 delivered by hydrating and compressing the hemostasis promoting material and
7 injecting the material by fluid pressure to the biopsy site.

PATENT

Attorney Docket No. 032005-120

1 18. The method of Claim 17, wherein multiple tissue samples are
2 removed at different radial locations around the cannula and delivery of the
3 hemostasis promoting material is repeated at different radial locations around the
4 cannula.

1 19. The method of Claims 17, wherein the hemostasis promoting
2 material is a sponge pledget.

1 20. The method of Claim 19, wherein the sponge pledget is absorbable.

1 21. The method of Claim 19, wherein the sponge pledget includes a
2 radiopaque marker.

1 22. The method of claim 17, wherein the tissue is removed from a
2 breast biopsy site.

1 23. The method of Claim 17, wherein the cannula remains in place at
2 the biopsy site after removal of the tissue for delivery of the hemostasis promoting
3 material.

1 24. A system for injecting a sponge into tissue, the system comprising:
2 a catheter having a side port adjacent the distal end for delivering a
3 pledget of sponge material in a hydrated state to the tissue;
4 an adaptor connected to the catheter for hydrating and delivering
5 the pledget to the catheter, the adaptor having a tapered lumen with a large

PATENT
Attorney Docket No. 032005-120

6 diameter proximal end and a small diameter distal end, wherein the small diameter
7 distal end is connected to the catheter; and
8 a pledget of radiopaque sponge material loaded in the adapter.

1 25. A method of delivering an absorbable radiopaque marker to a
2 biopsy site comprising:
3 removing tissue from a biopsy site through a cannula inserted to the
4 biopsy site; and
5 delivering an absorbable radiopaque marker through the cannula to
6 the biopsy site by hydrating and compressing the absorbable radiopaque marker
7 and injecting the marker by fluid pressure to the biopsy site.

1 26. A method of delivering a hemostatic material to a tissue site, the
2 method comprising:
3 placing a hemostatic material in a delivery catheter;
4 inserting a needle into tissue with a distal end of the needle at a tissue site;
5 inserting the delivery catheter containing the hemostatic material into the
6 needle; and
7 delivering the hemostatic material to the tissue site.

1 27. The method of Claim 26, wherein the needle is a biopsy needle and
2 the hemostatic material is delivered to a biopsy site after a biopsy procedure has
3 been performed.

1 28. The method of Claim 26, wherein the hemostatic material is an
2 absorbable sponge.